CUT—THRU UNIT (CTU), 628075

GENERAL DESCRIPTION

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1. GENERAL

1.01 This Section provides a general description of the ITT D448 cut-thru unit (CTU), 628075, to the schematic diagram level.

1.02 Whenever this Section is reissued, the reasons for reissue will be listed in this paragraph.

1.03 In the D448 system, the unit allows for the use of only one trunk processor and alarm (TPA) unit in Mode 1 operation, by providing digroup interconnection of the necessary signals.

2. DESCRIPTION

2.01 The unit mounts in the D448 multiplex shelf (common equipment mounting section) in connector J14C. The unit is used only in Mode 1 operation. Installation procedures for the unit are provided in Section ITTR-18-431.

2.02 The unit is available in Group -0 only.

2.03 The unit consists of an epoxy-glass printed circuit board (PCB). The front panel of the unit is fitted with an extraction handle which facilitates removal of the unit from the shelf. Identification on the front panel indicates the unit mnemonic (CTU), part number, and issue letter.

2.04 Printed circuit wiring is etched on one side of the PCB. The unit inputs and outputs are terminated in gold-plated contacts on the rear edge of the PCB. These contacts mate with a 70-pin contact edge connector on the rear of the multiplex shelf.

3. FUNCTIONAL OPERATION (FIG. 1)

3.01 The CTU provides the necessary carrier group alarm (CGA) connections between digroups A and B. This eliminates the Digroup B TPA unit by allowing the Digroup A TPA unit to serve both digroups.

3.02 The CTU is used only Mode 1 operation. Fig. 1 shows the interconnections between Digroups A and B. If the CTU is removed from the multiplexer shelf while the terminal is in service, a local alarm will occur. The system card out (SCO) loop on the unit is fed to the TPA unit. If the SCO loop opens, the TPA unit causes a local alarm.

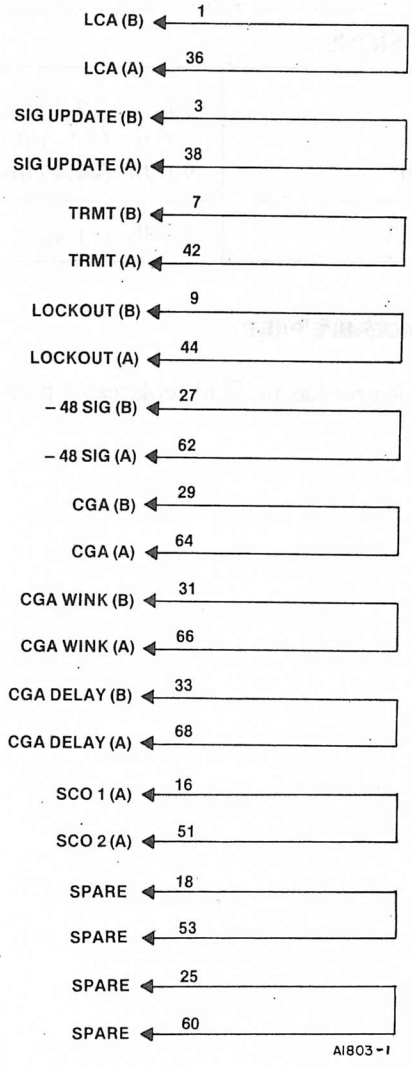

Fig. 1— CTU, 628075, Schematic Diagram

4. OPTIONS

4.01 This unit has no field-selectable options.

5. TECHNICAL SUMMARY

5.01 A summary of technical specifications for the unit is given in Table A.

TABLE A

ITEM	SPECIFICATION
OPERATING ENVIRONMENT	
Temperature Humidity Altitude	0° to +55°C To 95% at 40°C (no condensation) To 14,000 ft (4,267 m)
DIMENSIONS	
Height Width Depth	5.0 in. (12.7 cm) 1.6 in. (4.1 cm) 9.6 in. (24.4 cm)
WEIGHT	0.3 lb (0.1 kg)

6. REPLACEABLE PARTS

6.01 This unit has no field-replaceable parts.

7. REFERENCES

7.01 The engineering drawings noted in Table B were used in the preparation of this Section.

TABLE B

TYPE	DRAWING NO.
Assembly Schematic	628075-000 628075-002

7.02 Related information on the CTU may be found in the ITTR Sections referenced in Table C.

TABLE C

TITLE	SECTION NO.
Connectorized Multiplex Shelf (MS/WC7, MS/WC5, MS/C7 and MS/C6), 628001, 628005, 628011 and 628015 — General Description	ITTR-18-005
Mode 1 Common Equipment — Installation and Pretest	ITTR-18-431